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DECREE OF MAY 19, 2003, 538 U.S. 720

KANSAS V. NEBRASKA & COLORADO

NO. 126, ORIG, U.S. SUPREME COURT

DEPOSITION OF STEVEN P. LARSON,

produced, sworn, and examined on Tuesday, the 24th day of February, 2009, between the hours of 8:00 o'clock in the forenoon and 6:00 o'clock in the afternoon of that day at Husch Blackwell Sanders LLP, 4801 Main Street, in the City of Kansas City, County of Jackson, State of Missouri, before:

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Registered Professional Reporter
of
JAY E. SUDDRETH & ASSOCIATES, INC.
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a Certified Court Reporter within and for the State of Missouri.

Taken on behalf of the State of Nebraska.

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Also Present:
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Mr. Bill Vogel
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Mr. Thomas E. Riley, P.E.
Mr. Marc Groff, P.E.
Mr. Gordon R. Coke, P.E.
Mr. Marcus A. Powers
Mr. James R. Williams, P.E.
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EXHIBITS

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24	Kansas' Review of Nebraska's Request for Change in Accounting Procedure September 18, 2007	22

STEVEN P. LARSON,
of lawful age, having been first duly sworn to tell the truth, the whole truth, and nothing but the truth, testified as follows:

DIRECT EXAMINATION

BY MR. WILMOTH:

Q. Morning, Mr. Larson. Mr. Larson or Dr. Larson?
A. Mr. Larson.
Q. How are you feeling today?
A. Just fine, thank you.
Q. Anything that would preclude you from testifying truthfully and accurately today?
A. No.
Q. All right. Great. Since you came in later, my name is Tom Wilmoth and I'm with the law firm of Husch Blackwell Sanders here, and I represent the state of Nebraska. I'll be talking to you about a report on which your name appears entitled Kansas's Expert Response to Nebraska's Expert Report, quote, Estimating Computed Beneficial Use For Groundwater and Imported Water Supply Under the Republican River Compact.

For the record, that document was made an exhibit to Mr. Barfield's deposition yesterday.

That exhibit in our sequence is Exhibit 10, and I have provided Mr. Larson with a copy of that exhibit.

Before we get too far down the road, Mr. Larson, would you please explain briefly your educational background?

A. I have a Bachelor's Degree in Civil Engineering from University of Minnesota and a Master's Degree in Civil Engineering, also from the University of Minnesota.
Q. And when did you leave the University?
A. 1971.
Q. What have you done subsequent to that in a professional context?

MR. DRAPER: Glad you limited that.

A. I spent about nine years with the United States Geological Survey, Water Resources Division. Part of that time was in Minnesota. The remainder of the time was in Rustburg, Virginia at the headquarters of the USGS, and since 1980 I have worked for S. S. Papadopulos & Associates.
Q. And what is your current position there?
A. I'm a vice-president.
Q. How long have you been under contract to the state of Kansas?

A. I'm not sure. Some of my work began as early as about 1985, but there may have been a break between then and now, but throughout most of that period we have had some work for the state of Kansas.
Q. Can you describe the nature of that work, please?
A. Well, the initial work that we did beginning in 1985 was associated with the Arkansas River and the subsequent litigation over the Arkansas River compact that took place. Subsequent to that we also worked on the Republican River matter, beginning with the litigation and continuing on after the litigation in terms of work that we do on an ongoing basis for them on the Republican River. I also -- we have also done some work on some modeling in the Solomon River Basin for the state, and I have also served on sort of a peer review panel on work associated with the Middle Arkansas River Basin and on one of the other ground management water management districts in western Kansas.
Q. What is the general nature of your work with regard to the Republican River Basin for the state of Kansas?
A. Initially it involved work associated with the development of the groundwater model that was

ultimately dropped through the FSS process, and then since that time it's been dealing with groundwater modeling aspects associated with the various things that have happened since that litigation.
Q. So for purposes of this deposition, if I refer to the groundwater model, I'll be referring to the groundwater model that's employed in implementing the FSS. All right?
A. Okay.
Q. And so you, if I understand it, helped to develop the groundwater model?
A. Yes. I was a member of the group from Kansas that helped develop that model.
Q. And are you familiar with how to run that model?
A. Yes.
Q. Are you familiar with the model run that's commonly referred to as the base run for purposes of compact compliance?
A. Well, I'm familiar with the process that's used in the FSS to determine the impacts, if that's what you're referring to.
Q. In general terms, in order to determine a particular state's impact, how's the model run?
A. In order to determine the pumping impacts,

the pumping for that particular state is turned off and that calculation is compared against the calculation of the historical condition, and that difference is used to determine the impact.
Q. So when you start that process, there's an assumption that or there is -- I'm sorry, there is a condition that all pumping is on. Is that correct?
A. The historical condition, that's correct.
Q. And then to determine the impact of an individual state, Colorado, Nebraska, that state is turned off?
A. Pumping for that state is turned off.
Q. Would it be possible to also identify the impact of particular pumping if all pumping were off to start and then an individual's state pumping were turned on? In other words, the inverse of the current?
A. Would it be possible to make a calculation like that?
Q. Yes.
A. Yes.
Q. How would that calculation compare to the one that is currently made?
A. I assume it would be different or could be

different, I should say.
Q. Do you have any sense of the magnitude of the difference?
A. I think it would depend on when and under what circumstances.
Q. There's a discussion in the paper about calibrating the model. Can you explain that process?
A. Well, calibration generally is the process where you compare model results to comparable measured values of that particular condition or state or whatever that the model is calculated.
Q. And what is the calibration period currently?
A. Well, are you talking about in the RRCA model that we're talking about?
Q. Yes.
A. The calibration data is available, I guess some of it goes back to before the 1950s, but most of the data that's used to calibrate is after the 1950s or 1960s, so say from the 1950s or the 1960s to the present.
Q. I direct your attention to Page 3 of your report. And by the way, for the record's sake, I jumped over this, but you did participate

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in preparation of this report, I assume?
A. I did, yes.
Q. To what extent?
A. Well, all three of the authors would have contributed various pieces of it, and then I think Dale Book was responsible for taking all the pieces and putting them together into a final document.
Q. What piece did you contribute or pieces?
A. Mostly I think descriptions of the model and things associated with the model since that was my role.
Q. Okay. And are you familiar with a proposal by the state of Nebraska to adjust certain accounting procedures regarding CBCU and the imported water supply credit?
A. Yes.
Q. Do you understand that proposal to have any impact on the model itself?
A. By that you mean whether it changes the model or not?
Q. Correct.
A. No.
Q. What does the model actually compute when you employ it?
A. The model computes groundwater levels and

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changes the groundwater levels at the time, and then it also computes the interaction of the groundwater system with the stream system throughout the basin.
Q. There's some discussion in your paper at the top of Page 5 about the, quote, historical baseline condition. Do you see that? Very top.
A. Page 5?
Q. Page 5. Very top of Page 5.
A. Yes.
Q. What does that refer to?
A. Historical baseline condition?
Q. Yes.
A. It refers to the run of the model that considers what actually happened or tries to simulate what actually happened historically.
Q. Is it necessary to rely on that historical baseline condition for some reason?
A. Well, I think, yes, there is.
Q. And what is its value?
A. Its value is that that condition can be compared to measured data or productions of measured data to assess the performance of the model in terms of its ability to compute groundwater levels or changes in groundwater levels and interactions with the stream and the degree of that interaction.

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Q. So when we talk about calibration, does that mean that the model's been calibrated against the historical baseline condition?
A. No.
Q. Help me understand that relationship, if you will.
A. The historical baseline condition is the simulation using the model of the historical condition. Calibration is the act of comparing what the model is estimating with actual measured data.
Q. Okay. So the historical baseline condition, does this include the period 1918 to 2000 as reflected on Page 3 of your report?
A. The simulation that's used begins in 1918 and runs through the present time, basically.
Q. So at Page 3, the last paragraph, third sentence, as I read it says, "The committee had computed the impacts of groundwater pumping over an extended historical period, from the pre-development conditions of 1918 to the post-development conditions of 2000." Is that correctly stated?
A. Yes.
Q. Does that mean, essentially, that the historical baseline period included -- at least

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half of that period did not include significant groundwater pumping?
A. The period from 1918 to 2000, probably half of it does not include significant groundwater pumping.
Q. And if I understand correctly, one of the criticisms of the Nebraska proposal in this paper is that it reflects an unrealistic condition in that there is no pumping going on in the baseline?
A. No. The criticism is that the historical baseline, in terms of the calibration, which focuses on the period generally after the 1950s.
Q. Why is that? Why does it focus on that period?
A. Because that's when there's data available to compare the model results to measured values.
Q. And what would you expect the data regarding groundwater levels to show between, say, 1918 and 1965?
A. I would expect them to show and they do show that in significant portions of the basin, groundwater levels have declined over time.
Q. Between 1918 and 1965?
A. I thought you asked me about the period from

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1950 forward.
Q. No. I'm asking you about the period 1918 to 1965.
A. And what's the question?
Q. The question is, what would you expect groundwater levels to have done? What would the data show, if it existed?
A. I would expect that groundwater levels would go up and down and base loads would go up and down depending on climatic conditions.
Q. Would you expect a significant variation in groundwater levels between 1918 and 1965?
A. It would depend on where and what kind of climatic conditions you had from year to year. They could be significant.
Q. On the order of what kind of magnitude, do you think?
A. I would say in places they could be as high as tens of feet.
Q. And what stress during a predevelopment period would result in that change in groundwater levels?
A. It would be associated with climatic conditions that would produce significant recharge in particular years when it was wetter versus dryer.

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Q. One of the statements made in your report in the Page 1, the executive summary, second paragraph, it says "The model and the accounting procedures provide, quote, reasonable and appropriate results, close quote." Do you see that at the end of that paragraph?
A. Yes.
Q. What does that mean, in your view?
A. It means that when the model was developed, it was calibrated to historical data of both groundwater levels, groundwater level changes, stream flow interaction, changes in stream flow interactions over time, and that that comparison was judged to be a reasonable comparison. And that the applications of the model for the purposes of the accounting, given all the considerations of the model's capability and uncertainty, are a reasonable and appropriate use of the model.
Q. Are there any modifications of the model and/or the accounting procedures that would be reasonable and appropriate, in your view?
A. Well, there are and there were concerns about some of the input parameters to the model that had been expressed and described in the modeling report. I could certainly see the possibility

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there's an opportunity to improve on some of those parameters.
Q. So neither the model nor the accounting procedures, in your view, were intended to be stagnant. In other words, they could be improved upon if it improved the accuracy of the accounting?
A. I would state it a little bit differently. I would say the model itself is not intended to be static if there are improvements to the model parameters and conditions that can be justified based on, say, comparisons to calibration data like was done originally, they might be appropriate changes to make.
Q. What about the accounting procedures themselves?
A. I don't understand the question. What do you mean, what about them?
Q. Well, there's a distinction between the model and the accounting procedures. Is that correct?
A. The model is used to provide input to the accounting procedures.
Q. Okay. And did your prior answer apply also to the accounting procedures, namely that

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they could be improved?
A. No, it didn't.
Q. So my question to you is, are there some changes to the accounting procedures that would be reasonable and appropriate, in your view?
A. There may be. I don't know of any offhand. The problem -- the difference between my response earlier and the answer to that question is in the case of improving the model parameters, we do have some actual measured data that we can compare against. I'm not sure, in the accounting process, that we actually have measured data that we can actually compare against in that same vein.
Q. Let me speak more generally. From the standpoint of a person who has to run the model and conduct accounting, that is, in part, your role?
A. My role is to assist them in using the model.
Q. Okay. And in that capacity, to the extent it changed the accounting procedures, better accounted for water in the system, would that make your job easier?
A. I don't know the answer to that question.
Q. You don't have an opinion about whether

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all water should be accounted for or not?
A. Well, I don't understand that question, either.
Q. If you run the model and you apply the accounting procedures and there were some residual values that could not be accounted for, would you -- your ability to account for that water be improved by a tool that eliminated those residual values?
A. I'm still confused.
Q. Let me give you an example. Let's say that there's a diversion on the system that diverts a thousand acre feet, and under the accounting procedures, 40 percent of that would be return flow. Correct? Generally speaking.
A. I don't know.
Q. You're not familiar with the accounting procedures?
A. I don't know the accounting procedures in detail, no.
Q. You have any opinion about Nebraska's proposed change to the accounting procedures?
A. Which proposed changes are you talking about?
Q. The ones regarding CBCU and IWS.

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A. Yes, I do, with respect to its use of the model.
Q. What is that opinion?
A. It's described in this report.
Q. I'm having a hard time distinguishing between Mr. Barfield's opinion and your opinion, because if you don't understand the accounting procedures, I'm having a hard time understanding who you can evaluate a proposed change to the accounting procedures?
A. I understand how the model is being used to input to the accounting procedures and that's the extent of my role in this process.
Q. Well, could you point to me in this report where your opinion resides?
A. I think if you look at the conclusions.
Q. Which page, please?
A. On Page 10. These would summarize my opinions about the use of the model as it relates to input to the accounting procedures.
Q. Which one? Which conclusion?
A. The first one. The second one. The third one. The fourth one. The fifth one I understand it, but I understand it largely based on information provided by Mr. Book and Mr. Barfield. And the last one.

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Q. All right. I want to take these in order. The first one, second sentence of that paragraph indicates what? Could you read that sentence, please?
A. "The change would have a significant effect on the results of the groundwater model used in the accounting procedures."
Q. Okay. And that opinion is based on what activity?
A. It's based on looking at the modeling calculations under the different scenarios that are being considered.
Q. Okay. No. 2, this would be the second paragraph under the Conclusions section. This indicates, as I understand it, that this concept of additivity, if you will. Do you know what I refer to by that?
A. Yes, I do.
Q. That this concept of additivity is not stated in the model or the accounting procedures. Right?
A. Yes. That's correct.
Q. But you just testified you have no knowledge of the accounting procedures?

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A. I have knowledge of what was associated with the model's application to the accounting procedures, and this is something associated with the model's application.
Q. Now, No. 3, the third paragraph says, as I read it, "There is no error in the agreed upon method of accounting." How do you determine that, if you don't understand the accounting procedures?
A. I understand how the model is applied to the accounting procedures and that's what is being referred to there.
Q. How is the model applied to the accounting procedures?
A. The model is used to calculate the differences between the historical condition and the condition in which there's no pumping in each of the individual states. It's also used to calculate the effect of imported water in terms of the difference between a run with the imported water considered and a run without it considered, and that those results are then fed into the accounting procedure.
Q. Let's back up to No. 2. This concept of additivity I'd like to revisit with you. What do you understand that concept to be?
A. I understand it to be a concept where if you

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look at the summation of the calculations associated with each state's impact due to pumping close to the effect of the imported water supply and you compare that to the calculated effect of removing all the pumping and the imported water from the model and making a similar calculation, it's comparing those -- that sum to that particular difference.

Q. Is that equivalent in layperson's terms as saying effectively the sum of the parts would equal the whole?

A. I don't know if I would characterize it quite that way. It's basically saying if you look a the sum of the individual calculations, how do they compare to the calculation that you would make if you used the model to calculate the difference between the condition where all the pumping and the input water supply was turned off versus the historical condition.

Q. Is that something similar to something known as the virgin water supply metric? Are you familiar with that term?

A. I'm familiar with the references to that calculation as being virgin water supply metric.

(Whereupon, Larson Deposition Exhibit Number 24 was marked for

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identification by the reporter.)

Q. (By Mr. Wilmoth) I'm going to hand you Exhibit 24, ask you to look at the fourth paragraph on Page 2. First of all, have you ever seen this document?

A. Yes, I have.

Q. Did you participate in generating this document?

A. Yes, I believe I did.

Q. What input did you provide in that regard?

A. Well, I would have drafted up parts of the document, I believe.

Q. Did you draft the fourth paragraph on Page 2?

A. That I'm not sure as I sit here today.

Q. What is the import or the message of Paragraph 4 in this document on Page 2?

A. Basically says you can make a calculation using the model where you turn off all the pumping and the imported water supply simultaneously and compare that to the historical conditions. However, as noted, it says that doesn't provide a portion of the impact among the states, and that at least at the conceptual level, this would represent what the

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stream flows would have been if this activity had not occurred.

Q. And the first sentence of the following paragraph reads how?

A. "This measure does not provide a metric for comparing the accounting method agreed to in this -- does provide a method of metric for comparing the accounting method agreed to in the settlement with Nebraska's alternative accounting proposal."

Q. How does the virgin water supply metric differ from the current Nebraska proposal?

A. Well, the current Nebraska proposal takes a series of runs and tries to combine them in a certain fashion such that that result adding up all those effects would equal the total effect.

Q. And in the words of this document, does that provide a metric for comparing the accounting method that Nebraska has presented?

A. It provides a metric for comparing the sum of the impacts calculated with the model.

Q. Can the virgin water supply metric be used to test the accuracy of the Nebraska proposal and comparing it with the current accounting methods?

A. I don't think it can be used to test the

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accuracy, because we don't know what the answer is. It can be used to compare that result to the total effect.

Q. And was it the point of this document to say that that should be used to compare the proposal in 2007 with the current procedures? Isn't that the point of this first sentence in Paragraph 5?

A. That it should be used as a comparison? It says it does provide a comparison.

Q. And did you make that comparison?

A. At that time we did, yes.

Q. And you relied on the virgin water supply metric. Correct?

A. That's correct.

Q. Can you calculate actual depletions using the model?

A. What do you mean by actual depletions? Are you saying the true depletions?

Q. True depletions.

A. I don't know that we know what the true depletions are. All the model does is provide an estimate.

Q. Okay. Is one of the criticisms in your paper that the Nebraska proposal starts from an

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unrealistic baseline?
A. I would say it's a little different than that. It includes several baselines, many of which, except for the historical baseline, we don't have measured data to compare to.
Q. Uh-huh. Are you referring generally to these 11 runs that Nebraska proposes making?
A. The different combinations.
Q. In addition to the current five?
A. Yes, and the differences in those runs.
Q. They are currently five runs that are made under the existing procedures?
A. To compute four differences, that's correct.
Q. Okay. Do you have any opinion about how long it would take to make those additional 11 runs?
A. I suppose whatever it takes to take five runs, it would take two times that or so to make 11 runs.
Q. Do you have any idea how long it takes to make the five runs?
A. No, I don't.
Q. But it would be reasonable to expect it might take twice as long?
A. Correct.

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Q. In your conclusion No. 4 on Page 10 you speak to some post processing approaches. The final sentence of that, could you read that for me?
A. Thus the IWS credit is no longer directly calculated by the model with the actual water level conditions.
Q. And what is that? What do you mean by that?
A. That when the imported water supply credit is calculated in the proposed method, it uses combinations that are other than the historical condition, along with historical condition to try to estimate the effect of the imported water supply.
Q. You're familiar with Dr. David Ahlfeld's report, are you not?
A. Yes.
Q. Are you familiar with the concept expressed in Mr. Ahlfeld's report of the residual values at the sub-basin level?
A. If you're referring to the differences between the total impacts and impacts calculated with the -- all the pumping turned off and imported water supply turned on simultaneously, yes.
Q. Do you see any value from a modeling

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and/or accounting standpoint to eliminating those residual values?
A. I think conceptually it would be helpful, but I think when you look at trying to apportion the total effect that you get from the analysis of all the pumping off and the imported water supply off simultaneously, that apportionment is not a straightforward process. It involves, I think, both objective and subjective issues.
Q. Let's set aside the apportionment of the total impact for a moment and think about the sub-basin level. With regard to identifying impacts within particular sub-basins in Nebraska, for example, do you have any value to eliminating those residuals?
A. I think the answer I just gave even applies to sub-basin level.
Q. So in your assessment, there's no distinction between accounting at the sub-basin level and accounting at the -- in total?
A. No, that's not what I was saying. I was saying when looking at the application of the model, that when you look at the condition where all the pumping is off and the imported water supply is off against the historical condition as a total, and you

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compare that to even other calculations at the sub-basin level, trying to apportion that among the causes is not a straightforward process.
Q. You agree, though, that a process that eliminates that residual is inherently more accurate than a process than does not, regardless of the apportionment of the cause?
A. Well, I'm afraid we can't judge the accuracy, because we don't have measurements to compare to.
MR. WILMOTH: Let's take about ten minutes and we'll come back and finish up.
(Brief recess taken.)
Q. (By Mr. Wilmoth) Mr. Larson, we spoke earlier about the virgin water supply metric. Has Kansas developed a different test or metric by which it's measuring proposals to accounting changes?
A. Well, when we evaluate or at least when I evaluate these effects, there are a number of factors that one might consider. Some of them subjective, some of them more objective.
Q. Can you enumerate those for me?
A. Well, for example, on the imported water supply credit, at least from my perspective one of

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the issues that I have, and I can't speak directly for Kansas, obviously, but one of the concerns that I would have is that that -- that the calculations that drive that ultimate calculation are based on estimates of how much water is lost from canals in the great northern part of the model domain along the Platte River, and it's a significant amount of water. So that uncertainties in that can play into, at least from Kansas's perspective, how one might try to determine what the impacts of that are.

Another example is that when looking at the impacts of, say, stream drying and the occurrence of stream drying, the model does not include runoff in terms of looking at stream conditions at a particular time. That was by design. And that those conditions can affect stream losses and they can affect calculations in the models, so it's another source of uncertainty that you have to factor into making those kind of calculations.

Q. I want to talk briefly about some of the model runs that are currently made. Could you give me an example of one of those runs in terms of who's on or off at any given time?

A. Under the current system, is that what you're talking about?

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Q. Yes. Any of the five that are currently employed.

A. Well, the historical condition is based on everybody's estimates of pumping. It's based on estimates of recharge of precipitation. It's based on irrigated areas. It's based on a number of different input parameters, and then the model is actually run to calculate groundwater levels and stream flow interaction under those conditions. That's one of the runs.

Q. Is that the run that considers all pumping and boundary charge on?

A. That's correct.

Q. And that run, if I understood you earlier, has been calibrated against the 1918 to 2000 data. Is that accurate?

A. Well, the data against which it was calibrated is from the 1950s and '60s forward because that's when the data are available to make that comparison, but that's what it was calibrated against.

Q. And I think we spoke earlier about in terms of making a particular run and trying to determine impacts from a particular state, that state's pumping is turned off. Is that a correct

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statement?

A. That's correct, and the result of that run are compared to the run that we just spoke about.

Q. Okay. So, for example, to determine the Nebraska impact, the run is Colorado on, Kansas on, mound recharge on, Nebraska pumping off?

A. For the pumping impact, that's correct.

Q. And same would be true to determine the impact of the mound, I guess. Is that all pumping on but the mound off?

A. That's correct, and compare it against the historical condition.

Q. And to determine -- is there a run made where Colorado pumping is on and Kansas pumping is on? Well, strike that. Let me back up.

We talked earlier about Nebraska proposing to do some additional runs.

A. Yes.

Q. Do you understand one of those runs to be, for example, Colorado pumping on, Kansas pumping on, mound recharge off and Nebraska pumping off?

A. That sounds familiar, like it's one of the runs.

Q. And if I understood you correctly, one

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of the criticisms about that idea is that that can't -- that kind of run can't be verified in the field, so to speak?

A. The depletions or changes in groundwater levels and changes in stream flow interaction associated with those runs can't -- is not measured. We don't know what that amount is.

Q. And do you measure the impact of a run that is currently done where Colorado pumping is on, Kansas pumping is on, the mound is off and Nebraska pumping is on? That's a current run. Correct?

A. Did you say that mound was off?

Q. The mound is off. So it would be Colorado on, Kansas on, mound off, Nebraska on.

A. And what was the question? Is there a measurement of that?

Q. Yes.

A. No.

Q. So what I'm trying to understand is, why is it a legitimate criticism in one case but not the other? Why is your criticism legitimate in one case but not the other? In other words, what's the difference?

A. I'm not sure I understand your question.

Q. Neither can be measured. Correct?
A. Neither.
Q. Neither impact can be measured.
A. That's correct.
Q. Okay. Yet we do one run knowing that that actual impact cannot be measured. Correct?
A. I'm not sure I understand what you're referring to.
Q. We currently conduct five runs. Correct?
A. That's correct.
Q. At least four out of five of those we can't measure the impact. Right?
A. For four of those runs they didn't actually happen, so we don't have measurements what that was.
Q. Okay. And is that not true with regard to the runs Nebraska is proposing?
A. Is that not true?
Q. Is it the same situation?
A. It is the same situation.
Q. Okay. So my fundamental question is, how do you distinguish those runs? Namely the four that we do and the additional runs Nebraska proposes to do.
A. I distinguish them by looking at the

differences, the differences in the way it's currently done are all taken as differences from the historical condition that we compare the measurements as opposed to differences, other differences that are being proposed, where we can't compare any one of those to components of the differences to measurements.
Q. Why is that?
A. Because we don't have the measurements.
Q. And how is that different from the four runs that I thought we just said we couldn't measure?
A. The differences for the four runs that are used are all made from the common historical condition that we can measure, so the differences are departures from the --
Q. From the baseline?
A. -- the condition where we do have measurements available.
Q. And what you're suggesting is none of these runs that Nebraska is proposing can be compared to that baseline condition?
A. No. It's the other differences that they're introducing don't have that same property that they include a departure from a measured condition.

They're differences from two unmeasured conditions. Or I should say, they're differences from two conditions for which measurements are not available for either condition.
Q. Are there any additional runs that could be made that would satisfy the test you're referring to?
A. Well, anything that compares to the historical condition would satisfy at least the general nature of that test. Obviously the further away you get from that condition, I think the greater the uncertainty would become.
MR. WILMOTH: Okay. I think that's all he have got, John.
MR. DRAPER: We'll just take a minute.
(Brief recess taken.)
MR. DRAPER: We have no further questions.
MR. WILMOTH: Thank you very much.
(Witness excused.)

_____.
STEVEN P. LARSON

STATE OF _____)
) SS:
COUNTY OF _____)

Subscribed and sworn to before me this____ day of _____, 2009.

_____.
NOTARY PUBLIC

My Commission Expires: _____.

In re: Non-Binding Arbitration

CERTIFICATE

I, JANE A. BLACKERBY, a Certified Court Reporter within and for the State of Missouri, hereby certify that the within-named witness was first duly sworn to testify the truth, and that the deposition by said witness was given in response to the questions propounded, as herein set forth, was first taken in machine shorthand by me and afterwards reduced to writing under my direction and supervision, and is a true and correct record of the testimony given by the witness.

I further certify that I am not a relative or employee or attorney or counsel of any of the parties, or relative or employee of such attorneys or counsel, or financially interested in the action.

WITNESS my hand and official seal at Kansas City, Jackson County, Missouri, this 28th day of February, 2009.

_____

JANE A. BLACKERBY, RPR, CCR No. 877
Certified Court Reporter